

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

CIF LICENSING, LLC, d/b/a :  
GE LICENSING, :  
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Plaintiff, :  
 :  
v. : Civil Action No. 07-170-JJF  
 :  
AGERE SYSTEMS INC., :  
 :  
Defendant. :

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**MEMORANDUM OPINION**

July 30, 2010  
Wilmington, Delaware

  
Farnan, District Judge.

Presently before the Court are Defendant Agere System Inc.'s Renewed Motions For Judgment As A Matter Of Law of: 1) No Direct Infringement Of Any Claims Of Any Of The Asserted Patents (D.I. 405); 2) No Indirect Infringement Of Any Claim Of U.S. Patent No. 6,198,776 (D.I. 407); 3) No Infringement Under A Theory Of Component Liability Pursuant To 35 U.S.C. Section 271(f) (D.I. 409); and 4) No Infringement Under The Doctrine Of Equivalents (D.I. 411). Also before the Court is Plaintiff CIF Licensing, LLC's Motion To Renew Its Motions For Judgment As A Matter Of Law Or In The Alternative For A New Trial (D.I. 394) that: 1) U.S. Patent No. 5,048,054 Is Infringed and Is Not Invalid (D.I. 365)<sup>1</sup>; 2) U.S. Patent No. 5,446,758 Is Infringed and Is Not Invalid (D.I. 366)<sup>2</sup>; 3) U.S. Patent No. 5,428,641 Is Infringed and Is Not Invalid (D.I. 367)<sup>3</sup>; and 4) U.S. Patent No. 6,198,776 Is Infringed and Is Not Invalid (D.I. 368)<sup>4,5</sup>

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<sup>1</sup> Plaintiff's Motion For Judgment As A Matter Of Law That U.S. Patent No. 5,048,054 Is Infringed And That It Is Not Invalid (D.I. 365) is renewed both with respect to invalidity and indirect infringement. (D.I. 394.)

<sup>2</sup> Plaintiff's Motion For Judgment As A Matter Of Law That U.S. Patent No. 5,446,758 Is Infringed And That It Is Not Invalid (D.I. 366) is renewed both with respect to invalidity and indirect infringement. (D.I. 394.)

<sup>3</sup> Plaintiff's Motion For Judgment As A Matter Of Law That U.S. Patent No. 5,428,641 Is Infringed And That It Is Not Invalid (D.I. 367) is only renewed with respect to indirect infringement. (D.I. 394.)

<sup>4</sup> Plaintiff's Motion For Judgment As A Matter Of Law That U.S. Patent No. 6,198,776 Is Infringed And That It Is Not Invalid

## BACKGROUND

On March 23, 2007, Plaintiff CIF Licensing, LLC, d/b/a GE Licensing ("Plaintiff") filed this patent infringement action, alleging infringement of U.S. Patent Nos. 5,048,054 (the "'054 patent"), 5,428,641 (the "'641 patent"), 6,198,776 (the "'776 patent"), and 5,446,758 (the "'758 patent") (collectively, the "patents-in-suit") by Defendant Agere Systems Inc. ("Defendant"). The accused products are hardware and software modems and modem systems manufactured by or sold by Defendant. A jury trial was held from February 2, 2009, through February 13, 2009. On February 17, 2009, the jury entered a Special Verdict Form specifying their findings as to direct infringement, indirect infringement, willful infringement, anticipation, and obviousness for each asserted patent, as well as their findings with respect to reasonable royalty rates and total damages. (D.I. 371.) Specifically, the jury found: 1) direct infringement of all

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(D.I. 368) is only renewed with respect to invalidity. (D.I. 394.)

<sup>5</sup> Other post-trial motions are also pending before the Court. (D.I. 395 (Plaintiff's Motion for Prejudgment and Postjudgment Interest); D.I. 396 (Plaintiff's Motion for Entry of Permanent Injunction or the Conditioning of Continued Willfully Infringing Activity On a Royalty); D.I. 397 (Plaintiff's Motion for Enhanced Damages); D.I. 398 (Plaintiff's Motion for Attorney Fees, Expenses, Costs, and Interest); D.I. 399 (Plaintiff's Motion for an Accounting of Agere's Sales Made on or After January 1, 2009); D.I. 403 (Defendant's Motion for Judgment as a Matter of Law That the Jury's Damages Award Is Unsupported).) The Court will address these motions in separate opinions or orders.

asserted claims of all four patents-in-suit; 2) indirect infringement of all asserted claims of the '776 patent; 3) no indirect infringement of any asserted claim of the '054, '641, and '758 patents; 4) willful infringement of the '641 and '776 patents; 5) no willful infringement of the '054 and '758 patents; 6) anticipation of all asserted claims of the '054 and '758 patents; and 7) obviousness of all asserted claims of the '054, '758, and '776 patents. (Id.)

On February 9, 2009, at the close of Plaintiff's case-in-chief, Defendant orally moved, inter alia, for judgment as a matter of law, under Fed. R. Civ. P. 50(a), that Plaintiff did not establish: 1) direct infringement as to any claims of the asserted patents; 2) indirect infringement as to any claims of the asserted patents; 3) liability under 35 U.S.C. § 271(f); and 4) infringement under the Doctrine of Equivalents. Trial Tr. Vol. 4, 1016-1017 (D.I. 382). After trial, Defendant renewed and briefed these motions under Fed. R. Civ. P. 50(b). (D.I. 405, 407, 409, 411.) On February 13, 2009, before the case was given to the jury, Plaintiff filed the motions for judgment as a matter of law, under Fed. R. Civ. P. 50(a) (D.I. 365, 366, 367, 368), that it presently renews under Fed. R. Civ. P. 50(b). (D.I. 394.)

#### **LEGAL STANDARD**

To prevail on a renewed motion for judgment as a matter of law following a jury trial, the moving party "must show that the

jury's findings, presumed or express are not supported by substantial evidence or, if they were, that the legal conclusion(s) implied [by] the jury's verdict cannot in law be supported by those findings.'" Pannu v. Iolab Corp., 155 F.3d 1344, 1348 (Fed. Cir. 1998) (citing Perkin-Elmer Corp. v. Computervision Corp., 732 F.2d 888, 893 (Fed. Cir. 1984)); see also Fed. R. Civ. P. 50(a) (stating that a court may grant judgment as a matter of law when "a reasonable jury would not have a legally sufficient evidentiary basis to find for the party on that issue."). In assessing the sufficiency of the evidence, the court must review all of the evidence in the record, viewing it in the light most favorable to the non-moving party and giving the non-moving party the benefit of all reasonable inferences that could be drawn from it. Reeves v. Sanderson Plumbing Prods., Inc., 530 U.S. 133, 150 (2000). The court may not weigh the evidence, make credibility determinations, or substitute its version of the facts for the jury's version. Id. Rather, the court must determine "whether, viewing the evidence in the light most favorable to the verdict winner, a reasonable jury could have found for the prevailing party." Johnson v. Campbell, 332 F.3d 199, 204 (3d Cir. 2003). Judgment as a matter of law should be granted "sparingly" in situations where "'the record is critically devoid of the minimum quantum of evidence' in support of the verdict." Id. (citing Gomez v. Allegheny Health Servs., Inc., 71 F.3d 1079,

1083 (3d Cir. 1995)).

## DISCUSSION

### I. Direct Infringement

A. Defendant's Renewed Motion For Judgment As A Matter Of Law Of No Direct Infringement Of Any Claims Of Any Of The Asserted Patents (D.I. 405)

The jury found that Defendant directly infringed all asserted claims of the '054, '641, '758, and '776 patents. (D.I. 371.) By its Motion, Defendant contends that Plaintiff failed to introduce sufficient evidence correlating the infringement analysis of its expert, Dr. Harry Bims, to Defendant's actual accused products because Dr. Bims did not "map[] each and every limitation in the claims of the [a]sserted [p]atents to any individual [a]ccused [p]roduct." (D.I. 406, at 7.) Further, Defendant contends that Dr. Bims' infringement analysis was inherently flawed. (Id. at 8.) Because Dr. Bims examined some (but not all) of the software source code provided by Defendant, and he did not examine any physical examples of the accused products, according to Defendant, Dr. Bims necessarily based his analysis on two faulty assumptions: 1) that each version of each type of source code infringes the patents-in-suit; and 2) that all accused products operate the source code in a manner that infringes the asserted claims of the patents-in-suit. (Id.) Specifically with respect to the '776 patent, Defendant further contends that it established at trial that the "PCM Upstream" feature of this patent is disabled by

default on some of the accused products. (Id. at 10.)

Furthermore, Defendant contends that, although the PCM Upstream functionality is present in the source code, this feature can never be switched "on" in some of the accused products. (Id. at 11.)

Plaintiff responds that the law does not require Dr. Bims to conduct the type of mapping analysis which Defendant contends was necessary. (D.I. 434, at 3.) Rather, according to Plaintiff, it need not have discussed each individual accused product because the infringing functionality of every version of the source code was the same. (Id. at 5.) Further, Plaintiff contends that Defendant failed to make any specific arguments for why judgment as a matter of law is appropriate with respect to the '054, '758, and '641 patents, and that in any event, Dr. Bims' testimony supports the direct infringement verdicts for each of the patents-in-suit. (Id. at 5-11.)

Direct infringement of a patent occurs when the patented invention is made, used, sold, offered for sale, or imported into the United States without authority during the term of the patent. 35 U.S.C. § 271(a). "In order to prove direct infringement, a patentee must either point to specific instances of direct infringement or show that the accused device necessarily infringes the patent in suit." ACCO Brands, Inc. v. ABA Locks Mfr. Co. Ltd., 501 F.3d 1307, 1313 (Fed. Cir. 2007). The patentee may

prove infringement by either direct or circumstantial evidence. Liquid Dynamics Corp. v. Vaughan Co., 449 F.3d 1209, 1219 (Fed. Cir. 2006).

The Court rejects Defendant's general contentions with regard to the sufficiency of Dr. Bims' testimony. Without question, "direct infringement requires a party to perform each and every step or element of a claimed method or product." BMC Res., Inc. v. Paymentech, L.P., 498 F.3d 1373, 1378 (Fed. Cir. 2007); see also Cole v. Kimberly-Clark Corp., 102 F.3d 524, 532 (Fed. Cir. 1996) ("[l]iteral infringement of a claim exists when every limitation recited in the claim is found in the accused device, i.e., when the properly construed claim reads on the accused device exactly.") First, Defendant has not cited any authority that requires the type of individualized "mapping" it argues for here, and in the Court's view, such "mapping" is not necessarily required as long as Plaintiff nevertheless presents sufficient evidence that all accused products have infringed all asserted claims of the patents-in-suit. See generally Johns Hopkins Univ. v. CellPro, Inc., 931 F. Supp. 303, 319 (D. Del. 1996), vacated-in-part and aff'd in relevant part, 152 F.3d 1342 (Fed. Cir. 1998) (finding evidence of infringement sufficient and denying judgment as a matter of law, even though plaintiff's expert did not test the accused devices because there was documentary evidence that devices were capable of infringing use).



Next, Dr. Bims' trial testimony adequately rebuts Defendant's contentions that faulty assumptions underlie his infringement analysis. Defendant contends that Dr. Bims did not evaluate most versions of the source code for hardware modems, and that Dr. Bims assumed that each version of each type of source code infringes the asserted patents. (D.I. 406, at 3.) However, Dr. Bims testified that he personally reviewed the Windows PC containing the software products which applied to Defendant's accused hardware modem products. Trial Tr. Vol. 2, 413:2- 414:10 (D.I. 380). He testified that the Linux PC, which contained revisions to the hardware modem software on the Windows PC, was reviewed by his assistant and that he and his assistant would have discussions about what was found on the Linux PC. Tr. 414:19- 415:17. Although Dr. Bims did not personally review the code on the Linux PC until after his deposition, he testified that nothing he discussed with his assistant prior to the deposition, and nothing he found in personally examining the code after the deposition showed any evidence that there were material differences between the versions of the source code on the Windows PC and Linux PC. Tr. 417:11- 418:15.

Defendant also contends that Dr. Bims assumed that all accused products operate the source code in a manner that infringes the asserted claims of each asserted patent. (D.I. 406, at 3.) Upon review of Dr. Bims' testimony, the Court's view is

that Dr. Bims' testimony is grounded on one very crucial assumption, but not the assumption Defendant alleges: Dr. Bims assumed that each of the accused products runs at least one version of the software produced to Plaintiff.<sup>6</sup> Tr. 500:10-19. Working from this basis, Dr. Bims testified that he compared each element in an asserted claim against Defendant's source code to uncover evidence in the source code that the claim element was present. Tr. 451:5-8. Dr. Bims opined that accused products which ran the produced source code necessarily infringed the asserted claims of the asserted patents. Tr. 494:8-17.

With regard to the '054 patent, Dr. Bims identified specific portions of the source code where he found infringement of each asserted claim, and explained how he determined that the infringing portions of the code run on all accused products. Tr. 446:24 - 450:16 (Claim 1); 450:17 - 452:16 (Claim 2); 452:17 - 454:11 (Claim 46); 435:8- 438:2. With regard to the '641 patent, Dr. Bims identified portions of the source code where he found infringement of each asserted claim, and further testified as to

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<sup>6</sup> In other words, as Defendant's counsel stated to Dr. Bims: "The basis for your analysis was your belief that you were looking at all of the code here, and therefore, whatever products it ran on, products would have to infringe because you were looking at all the code; is that right?" Tr. 213: 3-7. Defendant apparently does not dispute this assumption by Dr. Bims. In fact, Defendant's own witness, Mr. Richard Flanagan, similarly testified that he was provided with a computer containing the source code for all accused products when conducting his analysis. Trial Tr. Vol. 5, 1201:6 - 1202:9 (D.I. 387).

why the accused products necessarily run each of these infringing portions. Tr. 456:21-461:18, 462:4-463:15, 464:9-15 (Claim 1); 465:13-466:6, 466:9-469:8 (Claim 3); 469:15-470:3; 470:5-471:4 (Claims 5 and 7). Dr. Bims testified in a similar manner with regard to each asserted claim of the '758 patent and why the accused products all necessarily infringe. Tr. 471:8-481:22, 481:23-485:13 (Claim 1); 482:18-483:8, 483:9-17 (Claim 26); 483:18-484:6 (Claim 36).

The Court is satisfied that when Dr. Bims' testimony is viewed in the light most favorable to Plaintiff, and all reasonable inferences are drawn from it, Plaintiff has put forth sufficient evidence to support the jury's infringement findings on the '054, '758, and '641 patents. Accordingly, the Court concludes that an entry of judgment as a matter of law of no direct infringement with respect to the '054, '758, and '641 patents would be inappropriate.

Although the Court ultimately concludes that judgment as a matter of law of no direct infringement is also inappropriate with respect to the '776 patent, this issue requires closer attention. Unlike its arguments with respect to the '054, '758, and '641 patents, Defendant makes specific arguments for why the jury's direct infringement verdict on the '776 patent is not supported by the evidence presented at trial. Defendant argues that the '776 patent addresses the application of a precoder technique to the PCM Upstream feature, and that there was undisputed trial

testimony that Defendant did not enable the allegedly infringing feature (i.e., the PCM Upstream feature) of the accused products. (D.I. 406, at 10.) According to Defendant, "[t]he fact that a device is merely capable of being modified to operate in an infringing manner is not sufficient, by itself, to support infringement." (Id. at 10-11 (citing Telemac Cellular Corp. v. Topp Telecom, Inc., 247 F.3d 1316, 1330 (Fed Cir 2001))).

Plaintiff responds that the claims of the '776 patent are not limited to practice of PCM Upstream, and therefore, the fact that Defendant might disable the PCM Upstream feature does not mean that the accused products do not include the actual claim limitations or perform the actual claim steps. (D.I. 434, at 9-10.) Additionally, Plaintiff contends that the testimony at trial was that the "disabled" PCM Upstream feature on the accused products could essentially be "flipped to the on position at any time." (Id. at 11.) According to Plaintiff, "[a]bsent a permanent disablement of the infringing code, a product claim may be found infringed" if the accused product is reasonably capable of satisfying the claim limitations. (Id. at 10 (citing Hilgraeve Corp. v. Symantec Corp., 265 F.3d 1336, 1343 (Fed. Cir. 2001))).

Whether or not the scope of the '776 patent actually extends beyond the practice of PCM Upstream need not be examined here because the trial record makes clear that Plaintiff's infringement argument before the jury was focused on the accused products' use of PCM Upstream. In summarizing its infringement contentions

during closing, Plaintiff's counsel stated:

Agere's practice of the '776 patent is as plain as day... They're going to argue noninfringement, we disable it, that means we don't infringe...

But even if that were true that they disable it, it doesn't matter. Because all it takes is what amounts to a flipping of a switch to change it from disable to enable. They put it in there to allow you to do just that. If that's not making use of the patented invention and notoriously telling people that you got the patented invention in there for you to use, I don't know what it. They tell their customers how to do it.

Mr. Vernekar, Agere's soft modem guru testified about that. And the AT command document shows your customers how to enable PCM upstream and those groups of products that are disable[d], correct? It is. That's right. We tell them how to do it...

Come on, that's infringement.

Trial Tr. Vol. 8, 2056:13- 2057:22. See also Tr. 396:15-18 (Dr. Bims stating that the '776 patent "concerns the application of a precoder technique to what we call PCM Upstream or pulse code modulation upstream").

Turning to the issue of whether there was evidence that the PCM Upstream feature on the accused products was enabled (or could be enabled) such that the accused products infringed the '776 patent, the Court first concludes that Dr. Bims' testimony provided a sufficient basis for jury to conclude that the PCM Upstream feature was the infringing feature, and that it was present on all of the accused products. As he did with the '054, '758, and '641 patents, Dr. Bims testified that all of the accused products necessarily infringed the '776 patent by virtue of the

fact that the source code he examined infringed the claims of the '776 patent. Tr. 488:2-4; 494:8-14. Dr. Bims also testified as to the specific structures of the accused products which infringed Claims 1 and 30 of the '776 patent. Tr. 485:12- 486:22. Next, the Court concludes that there is sufficient evidence in the record on which the jury could have concluded that the PCM Upstream feature on the accused products was not *permanently* disabled. As Defendant notes, Mr. Ashok Vernekar did testify that there were two categories of soft modems sold by Defendant: "enabled" and "not enabled." Trial Tr. Vol. 3, 720:15-20 (D.I. 381). Mr. Vernekar testified that, for the modems in the "not enabled" category, a customer could not do anything to turn on the PCM Upstream feature. Tr. 720:21-24. However, Mr. Vernekar's statements to that regard are inconsistent with other portions of his testimony in which he testified that all of Defendant's soft modem products are in compliance with the V.92 standard, and that the V.92 standard required the modems to be capable of performing the PCM Upstream function. Moments before testifying that the PCM Upstream feature on the disabled modems could never be turned on, Mr. Vernekar stated,

Q: Now, Agere products that are in the soft modem category have the ability, they're compliant with the V.92 standard, they're capable of being compliant, correct?

A: That's right.

Q: That means they're capable of having PCM [U]pstream enabled and being functional; correct?

A: That's right.

Tr. 719:6-15. Another witness for Defendant, Mr. Surinder Rai, testified similarly. Tr. 581:20- 582:2 (Q: "When you say they're V.92 compliant - that includes their capability to perform PCM upstream transmission; isn't that correct?" A: "Yes.>").

Finally, the Court concludes that the evidence at trial supports a finding that the accused products were reasonably capable of performing PCM Upstream, even if that feature was disabled as a default setting. For purposes of conducting an infringement analysis, the Federal Circuit distinguishes between usual or reasonable uses of a device on one hand, and uses which are unusual, or merely possible, on the other hand. "[A]n accused device may be found to infringe if it is *reasonably capable* of satisfying the claims limitations, even though it may also be capable of non-infringing modes of operation." Hilgraeve Corp. v. Symantec Corp., 265 F.3d 1336, 1343 (Fed. Cir. 2001) (emphasis added); see also Huck Mfg. Co. v. Textron, Inc., 187 U.S.P.Q. 388, 408 (E.D. Mich. 1975) ("The fact that a device may be used in a manner so as not to infringe the patent is not a defense to a claim of infringement against a manufacturer of the device if it is also reasonably capable of a use that infringes the patent."). For example, in Key Pharms., Inc. v. Hercon Labs. Corp., 981 F. Supp. 299 (D. Del. 1997), aff'd, 161 F.3d 709 (Fed. Cir. 1998), the claimed invention was a drug-in-adhesive patch "compris[ing] an impermeable plastic backing layer laminated to an adhesive

layer that contains a pharmaceutically active drug dispersed therein.” Key Pharms., 981 F. Supp. at 304. The asserted claim required that the adhesive layer be capable of maintaining contact with the skin for at least 24 hours. Id. at 310. Although the accused patch was intended to be worn for 12-14 hours, the undisputed testimony at trial was that the patch could be worn for over 24 hours. Id. Accordingly, the accused patches were found to literally infringe. Id.

However, “[a] device does not infringe simply because it is possible to alter it in a way that would satisfy all the limitations of a patent claim.” High Tech Med. Instrumentation, Inc. v. New Image Indus., Inc., 49 F.3d 1551, 1555 (Fed. Cir. 1995) (emphasis added); see also Telemac Cellular Corp. v. Topp Telecom, Inc., 247 F.3d 1316, 1330 (Fed. Cir. 2001) (“[T]hat a device is capable of being modified to operate in an infringing manner is not sufficient, by itself, to support a finding of infringement.”). For example, in Telemac, the accused TRACFONE pre-paid cellular telephone system, as manufactured and sold, did not allow users to place international calls. Telemac, 247 F.3d at 1330. Although the capability for billing international calls was technically present in the phone’s source code, a user of the accused system was prevented from directly placing international calls by a restriction built into the software program stored in the phone’s memory. Id. Absent a modification to this restriction, the calculation of international charges was not



included in the accused system's billing algorithm. See id. In turn, the Federal Circuit upheld the district court's finding of no literal infringement because the claimed "complex billing algorithm" required calculation of billing charges using call rates based on classification of calls into local, long distance, international and roaming call categories. Id.

Mr. Rai's undisputed testimony was that Defendant generally shipped its accused products with the PCM Upstream feature disabled as a default setting. Tr. 581:13-17 ("From a use point of view, nobody uses [PCM Upstream]. So it's primarily turned off."); Tr. 685:20-22 ("I know that Agere has shipped mostly PCM [U]pstream disabled as a code provider to our customers."). Further, witnesses for Plaintiff and Defendant both testified that even when the PCM Upstream feature was disabled, the accused devices' software always maintained the capability of performing PCM Upstream. Tr. 518:15-19 (Q: "So if the software sold by Agere did not enable this method, if it turned it off, there wouldn't be any infringement, would there?" A: "The code that infringes would still be there.") (testimony of Dr. Bims); Tr. 582:5-8 (Q: "The capability [to perform PCM upstream transmission] is built into those products?" A: "The capability is in the software, or soft modem.") (testimony of Mr. Rai). Mr. Vernekar, Defendant's witness, testified that the AT Command Reference Manual shows Defendant's customers how to enable PCM Upstream in the group of products in which that feature is disabled. Tr. 716:10-22. Dr.

Bims similarly testified about the contents of the AT Command Manual, and stated "[a]s long as you have the AT command reference manual, you'll be able to easily change the [setting to enable PCM upstream]." Tr. 530:7-9. In light of the foregoing testimony, as well as the evidence that the accused products were sold as V.92 compliant, the Court concludes that there was a sufficient basis to establish that the accused products are reasonably capable of satisfying the claim limitations of the '776 patent, and of being used in an infringing manner by Defendant's customers (i.e, with PCM Upstream enabled). Accordingly, a reasonable jury could have found direct infringement, and an entry of judgment as a matter of law of no direct infringement with respect to the '776 patent is not warranted.

B. Defendant's Renewed Motion For Judgment As A Matter Of Law Of No Infringement Under the Doctrine of Equivalents (D.I. 411)

The issue of infringement by the Doctrine of Equivalents was not put before the jury. In fact, Plaintiff's expert specifically stated that he did not conduct a Doctrine of Equivalents analysis, Tr. 524:24 -525:2, and the Court struck any reference to the Doctrine of Equivalents from the jury instructions on the grounds that it was "not in the case." Trial Tr. Vol. 7, 1962:4-5 (D.I. 384). Nevertheless, Defendant seeks judgment as a matter of law because Plaintiff only alleged that the accused products literally infringed, and no evidence was supported at trial which could support a finding of infringement by the Doctrine of Equivalents.

(D.I. 411, at 1.) Plaintiff opposes judgment as a matter of law and contends that Defendant did not comply with the requirements of Rule 50(a)(2) of the Federal Rules of Civil Procedure. (D.I. 435, at 1.)

Because Plaintiff did not present a doctrine of equivalents argument, the jury found that all asserted claims of the patents-in-suit were directly infringed, and the Court will not grant judgment as a matter of law of no direct infringement, Defendant's Motion will be denied as moot.

C. Defendant's Renewed Motion For Judgment As A Matter Of Law Of No Infringement Under a Theory of Component Liability Pursuant to 35 U.S.C. Section 271(f) (D.I. 409)

The jury found that Defendant directly infringed all asserted claims of the '054, '641, '758, and '776 patents. (D.I. 371.) At the close of Plaintiff's case-in-chief, Defendant moved for judgment as a matter of law of no infringement under any theory of component liability, specifically under 35 U.S.C. § 271(f). Tr. 1017:5-8. Defendant also objected to the inclusion of a jury instruction on component liability, contending that no evidence was presented to support that theory of liability. Tr. 1978:21-1979:7. The Court ruled that there appeared to be at least circumstantial evidence of component liability by the testimony of at least two witnesses, and that the issue ought to go to the jury as a factual dispute. Tr. 1981:16- 1982:1.

Defendant contends that the jury instruction was unclear as

to whether Plaintiff's component liability was premised on § 271(f)(1) or § 271(f)(2),<sup>7</sup> but that in any event, Defendant failed to put forth evidence to satisfy common elements of both provisions. (D.I. 410, at 2-3 n.2.) Defendant first contends that judgment as a matter of law is appropriate because Plaintiff did not present any evidence of a "component" on which to base its theory of component liability. (Id. at 6.) Defendant next argues that Plaintiff did not present any evidence that the component from the United States was being "supplied by Defendant" for "combination" outside the United States. (Id.)

Plaintiff first responds that it presented evidence that all of Defendant's accused products are comprised of at least two chips, and that the codec chip is a "component" for § 271(f) liability purposes. (D.I. 432, at 4-5.) Further, Plaintiff contends that Defendant's sales and shipment spreadsheets show that Defendant shipped the codec chips from the United States to

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<sup>7</sup> In relevant part, the jury instructions provided that

A company is liable for inducing infringement by supplying components from the United State to another country only if you find:

(1) Agere supplied a component, or caused a component to be supplied, from the United States to a place outside of the United States; and

(2) The only substantial use for the component is in a product that is covered by the claim; and

(3) Agere was aware of the patent and is on notice that the product for which the component has no other substantial use may be covered by a claim of an Asserted Patent or may satisfy a claim.

(D.I. 369, at 28.)

Hong Kong, and that Defendant admitted that the codec and non-codec chips are combined outside the United States. (Id. at 5.) Alternatively, Plaintiff responds that Defendant ships software which is a "component," and that "[t]he jury could well have found that, based on the facts presented, a 'computer-readable copy' was sent from [the United States]" for each accused product. (Id. at 6-7.)

A product that is "not made in, used in, sold in, offered for sale in, or imported into the United States" is "outside of the reach of U.S. patent laws." Pellegrini v. Analog Devices, Inc., 375 F.3d 1113, 1118 (Fed. Cir. 2004). However, Section 271(f) of the Patent Act<sup>8</sup> "provides that infringement does occur when one

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<sup>8</sup>In full, the statute reads as follows:

(1) Whoever without authority supplies or causes to be supplied in or from the United States all or a substantial portion of the components of a patented invention, where such components are uncombined in whole or in part, in such manner as to actively induce the combination of such components outside of the United States in a manner that would infringe the patent if such combination occurred within the United States, shall be liable as an infringer.

(2) Whoever without authority supplies or causes to be supplied in or from the United States any component of a patented invention that is especially made or especially adapted for use in the invention and not a staple article or commodity of commerce suitable for substantial noninfringing use, where such component is uncombined in whole or in part, knowing that such component is so made or adapted and intending that such component will be combined outside of the United States in a manner that would infringe the patent if such combination occurred within the United States, shall be liable as an infringer.

35 U.S.C. § 271(f).

'supplies . . . from the United States,' for 'combination' abroad, a patented invention's 'components.'" Microsoft Corp. v. AT & T Corp., 550 U.S. 437, 441 (2007) (citing 35 U.S.C. § 271(f)(1)).

The Court first considers the issue of whether Plaintiff presented substantial evidence that Defendant supplied a "component" of a patented invention, and concludes that Plaintiff did not. "[A] component of a product, device, or apparatus is a tangible part of the product, or apparatus." Cardiac Pacemakers, Inc. v. St. Jude Med., Inc., 576 F.3d 1348, 1362 (Fed. Cir. 2009); see also Microsoft Corp., 550 U.S. at 449 n.11 ("'Component' is commonly defined as 'a constituent part,' 'element,' or 'ingredient.'" (citing Webster's Third New International Dictionary of the English Language 466 (1981))). Plaintiff contends that the codec chip, one of at least two chips that handles all or some modem signal processing functions of the accused products, is a component. However, the trial record provides no evidentiary basis on which a reasonable jury could have found that the codec chip was a "component" of the patented invention. The Court notes that when Plaintiff was questioned during the prayer conference about what evidence has been offered to support its component liability theory, Plaintiff responded that the testimony of Mr. Rai and Mr. Mantz supported component liability. Tr. 1980:2-7. Interestingly, in its Response to the

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present Motion, Plaintiff has not cited to any portion of either Mr. Rai's or Mr. Mantz's testimony. Rather, Plaintiff points to approximately fifty pages of testimony by its technical expert, Dr. Bims, and contends that Dr. Bims highlighted the two-chip structure of the accused products and "specifically identified the codec as part of the infringing structure." (D.I. 432, at 5.) The cited testimony discussed, inter alia, portions of source code which Dr. Bims opined necessarily infringed the patents-in-suit, but the Court could not locate any testimony discussing a two-chip structure, let alone any testimony which specifically discussed the codec chip as part of the infringing structure. Plaintiff additionally points to the testimony of Ms. Julie Davis and Mr. Gregory Swinehart as evidence that the codec chip is a component. While both Ms. Davis and Mr. Swinehart testified that they understood the codec chip to be one component of the accused products, see Tr. 910:17-21; Tr. 1920:6-17, neither was qualified to offer technical opinions on infringement.<sup>9</sup> See Tr. 776:21-777:3 (admitting Ms. Davis as an expert in the field of patent damages); Trial Tr. Vol. 6, 1677:18-23 (D.I. 383) (admitting Mr.

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<sup>9</sup> In fact, both Ms. Davis and Mr. Swinehart clarified that they were not experts on the technical aspects of the accused products, including codec chips. See Tr. 914:5-10 ("I understand [the codec chip] to be part of the product that is accused of infringement. And how the technical aspect was - it worked would be beyond my expertise.") (testimony of Ms. Davis); Tr. 1919:19-1920:5 (Q: Codecs and modems. You understand that a modem is a DSP chip or DSP functionality plus a codec; right? That's what makes a modem? A: Well, I think you're asking a technical question there.") (testimony of Mr. Swinehart).

Swinehart as an expert in the field of patent damages).

Plaintiff alternately contends that the software in its modems is a "component," but again, the Court was unable to locate any evidence in the record which could support such a conclusion. In examining when software becomes a "component" under § 271(f), the Supreme Court in Microsoft Corp. held that:

Until it is expressed as a computer-readable "copy," e.g., on a CD-ROM, Windows software-indeed any software detached from an activating medium-remains uncombinable. It cannot be inserted into a CD-ROM drive or downloaded from the Internet; it cannot be installed or executed on a computer. Abstract software code is an idea without physical embodiment, and as such, it does not match § 271(f)'s categorization: "components" amenable to "combination."

Microsoft Corp., 550 U.S. at 449. Mr. Richard Flanagan testified that the chip set in Defendant's V.34 compliant modems was created from a software base, and it was that software base that gave the modems V.34 compliance. Trial Tr. Vol. 5, 1205:5-17 (D.I. 387). Mr. Herb Cohen testified that he was responsible for the development of the DSP software which runs on the hardware modems. Tr. 738:4-9. Mr. Warren Waskiewicz testified that before 2001, Defendant manufactured a "substantial amount of its own products in the United States," but that Defendant closed its manufacturing facilities in the United States between 2001 and the present, and now manufactures its modems overseas. Tr. 1030:7- 1031:24. Contrary to Plaintiff's assertion, the Court concludes that no reasonable jury could infer, from the above-cited testimony, that Defendant's software was formatted as a computer-readable copy,



rather than abstract software code.

Because the Court concludes Plaintiff failed to present a minimum quantum of evidence that Defendant supplied a "component" of a patented invention from the United States for combination abroad, Defendant's Motion will be granted.

## **II. Indirect Infringement**

The jury found that Defendant did not indirectly infringe the '054, '641, '758. (D.I. 371.) However, the jury did find Defendant to have indirectly infringed the '776 patent. As previously discussed, the Court will not disturb the jury's findings with respect to direct infringement.

"Indirect infringement, whether inducement to infringe or contributory infringement, can only arise in the presence of direct infringement." Dynacore Holdings Corp. v. U.S. Philips Corp., 363 F.3d 1263, 1272 (Fed. Cir. 2004). Under 35 U.S.C. § 271(b), "whoever actively induces infringement of a patent shall be liable as an infringer." Liability for inducing infringement requires "that the alleged infringer's actions induced infringing acts and that he knew or should have known his actions would induce actual infringements." DSU Med. Corp. v. JMS Co., Ltd., 471 F.3d 1293, 1304 (Fed. Cir. 2006) (en banc) (citing Manville Sales Corp. v. Paramount Sys., Inc., 917 F. 2d 544, 554 (Fed. Cir. 1990)). Inducing infringement thus requires "actual intent to cause the acts which constitute the infringement." Hewlett-

Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469 (Fed. Cir. 1990). Further, "[t]he requirement that the alleged infringer knew or should have known his actions would induce actual infringement necessarily includes the requirement that he or she knew of the patent." DSU Med. Corp., 471 F.3d at 1304. Intent can be proven by either direct or circumstantial evidence. See Moleculon Research Corp. v. CBS, Inc., 793 F.2d 1261, 1272 (Fed. Cir. 1986).

A. Defendant's Renewed Motion For Judgment As A Matter Of Law Of No Indirect Infringement of Any Claim of U.S. Patent No. 6,198,776 (D.I. 407)

1. *Whether The Jury's Indirect Infringement Finding Is Supported By Substantial Evidence*

By its Motion, Defendant contends that the jury's finding of indirect infringement of the '776 patent is not supported by substantial evidence because Plaintiff failed prove that someone else in the United States used the infringing feature of the accused products (i.e., the PCM Upstream feature). (D.I. 408, at 7.) Defendant contends that the testimony at trial proved that Defendant disabled the PCM Upstream feature before shipping the accused products, and that Plaintiff did not put forth any evidence that Defendant's customers (or the end users of the accused products) in fact enabled the PCM Upstream feature. (Id. at 8-9.) Plaintiff does not specifically address Defendant's contention, and instead argues that it has proven the requisite direct infringement of the '776 patent, and as well as knowing

inducement and specific intent.<sup>10</sup> (D.I. 436.) Plaintiff contends that knowing inducement and specific intent were proven by un rebutted evidence at trial showing that Defendant knew of the '776 patent since at least 2002, made no changes to the accused products to avoid infringement, marketed the accused products as V.92 compliant, and provided its customers with documentation on how to enable PCM Upstream. (Id. at 8-10.)

"In addition to intent to bring about infringement and distribution of a device suitable for infringing use, the inducement theory of course requires evidence of *actual infringement by recipients* of the device." Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd., 545 U.S. 913, 940 (2005) (copyright infringement case) (emphasis added). Accordingly, the jury was instructed that in order to prove inducement, Plaintiff must have shown by a preponderance of the evidence, inter alia, that "the encouraged acts [which constitute direct infringement] are *actually carried out by someone else*." Tr. 2216:15-16 (emphasis added).

Upon review of the evidence in the light most favorable to Plaintiff, the Court concludes that Plaintiff failed to propound

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<sup>10</sup>Although Defendant's Motion argues that no infringement by inducement or contributory inducement was proven, Plaintiff's Memorandum In Opposition (D.I. 436) does not reference contributory infringement, and only argues that sufficient evidence of infringement by inducement was presented. Accordingly, the Court will only consider the jury's indirect infringement verdict in the context of infringement by inducement.

sufficient evidence that any of Defendant's customers or end users actually enabled the PCM Upstream feature on an accused product. As was previously discussed, the evidence at trial demonstrated that Defendant generally shipped its accused products with the PCM Upstream feature disabled as a default setting. See supra p. 16. Further, the testimony indicated that Defendant provided its customers with a reference manual with instructions on how to enable the PCM Upstream feature. See supra pp. 16-17. However, Plaintiff has not pointed to any evidence in the record showing that one of Defendant's customers or an end user of Defendant's accused products actually enabled the PCM Upstream feature. In fact, Plaintiff's expert, Dr. Bims, specifically admitted that he did not know if anyone ever enabled PCM Upstream. Tr. 530:15-18 (Q: "So you don't know for sure that anybody ever switched that from one to the other, correct?" A: "Right."). Because the record is devoid of any evidence that the recipients of the accused products carried out acts of actual infringement, no reasonable jury could have found that Defendant indirectly infringed the '776 patent. Accordingly, the Court will grant judgment as a matter of law of no indirect infringement of the '776 patent.

2. *Whether Defendant Complied With The Requirements Of Rule 50 Of The Federal Rules of Civil Procedure*

In response to Defendant's Motion, Plaintiff also opposes judgment as a matter of law on the grounds that Defendant did not comply with the requirements of Rule 50(a) of the Federal Rules of

Civil Procedure. (D.I. 436, at 11.) Specifically, Plaintiff contends that when Defendant orally made its motion for judgment as a matter of law at the close of Plaintiff's case-in-chief, Defendant did not describe the basis of its motion with sufficient specificity. (Id.) Defendant replies that it properly preserved the present motion at trial in that it complied with the Court's procedure for making motions for judgment as a matter of law, and the Court's procedure complies with Rule 50(a)(2). (D.I. 442, at 9-12.)

Pursuant to Rule 50(a)(2), "[a] motion for judgment as a matter of law may be made at any time before the case is submitted to the jury. The motion must specify the judgment sought and the law and facts that entitle the movant to the judgment." Fed. R. Civ. P. 50(a)(2). The motion must be "sufficiently specific to afford the party against whom the motion is directed with an opportunity to cure possible defects in proof which otherwise might make its case legally insufficient." Brokerage Concepts, Inc. v. U.S. Healthcare, Inc., 140 F.3d 494, 519 n.18 (3d Cir. 1998) (citing Lightning Lube, Inc. v. Witco Corp., 4 F.3d 1153, 1176 (3d Cir. 1993)). In assessing whether a motion for judgment as a matter of law brought under Rule 50(a)(2) is sufficiently specific, the court should consider not only the text of the motion, but also "the background, as reflected in the record, of what the party now claiming waiver understood as to the tenor of the Rule 50 movant's position and theory." Id. If the defendant

fails to raise an issue in a Rule 50(a)(2) motion with sufficient specificity to put the plaintiff on notice, the defendant waives its right to raise the issue in a Rule 50(b)(2) motion. Williams v. Runyon, 130 F.3d 568, 571-72 (3d Cir. 1997).

At the conclusion of the Plaintiff's case-in-chief, the Court informed counsel that its policy was to

allow counsel to . . . simply say that they would interpose motions both renewing motions for summary judgment in effect, and for failure to prove, and then list the counts that you would make those motions against. And if it's all counts, then you just say all counts. And then post trial as part of any post trial briefing, you can make the motions in writing with supporting authority.

Tr. 1015:23- 1016:7. At that time, Defendant orally moved for judgment as a matter of law of, inter alia, no infringement of any claim of any asserted patent, no infringement of any claim of the '776 patent specifically, no infringement by inducement, no infringement under 25 U.S.C. § 271(f), and no infringement under the doctrine of equivalents. Tr. 1016:15- 1017:18. Plaintiff immediately opposed, and the Court reserved decision. Tr. 1018:8-13.

Upon consideration of both the oral motion itself, and the context in which it was made, the Court is convinced that Plaintiff understood the tenor of Defendant's position. Although Defendant orally moved for judgment as a matter of law of no direct infringement concurrently, Plaintiff has not challenged the sufficiency of that motion under Rule 50(a). In light of the fact that Plaintiff evidently understood the basis on which Defendant

sought judgment as a matter of law of no direct infringement of the '776 patent, the Court is disinclined to believe that Plaintiff lacked an understanding of Defendant's contentions with regard to indirect infringement of the '776 patent. Further, Plaintiff initially made no objection to the content of the motion. However, at the close of Defendant's case-in-chief, Plaintiff's counsel stated that he was putting Defendant "on notice" that the bases for their motions for judgment as a matter of law were too broad to be sufficient. Tr. 1955:19- 1956:15. The Court responded, "I allowed them to do it. And I told them to generally put on the points that they would raise, which I think they did. . . . I understand what you're saying. But you know, as I put everybody on notice, I'm going to give expansive treatment to their motions." Tr. 1956:16-24.

Accordingly, the Court concludes that Defendant met the specificity requirement of Rule 50(a)(2) in moving for judgment as matter of law with respect to the indirect infringement of the '776 patent.<sup>11</sup>

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<sup>11</sup> Plaintiff similarly contends that Defendant failed to meet the requirements of Rule 50(a) when it orally moved for judgment as a matter of law of no infringement under a theory of component liability. To the extent Plaintiff raises this argument in opposition to Defendant's Renewed Motion For Judgment As A Matter of Law Of No Infringement Under A Theory of Component Liability Pursuant to 35 U.S.C. § 271(f) (D.I. 432), the Court adopts the same conclusion.

B. Plaintiff's Renewed Motion For Judgment As A Matter Of Law (D.I. 394) That U.S. Patent No. 5,048,054 Is Infringed (D.I. 365); Plaintiff's Renewed Motion For Judgment As A Matter Of Law (D.I. 394) That U.S. Patent No. 5,446,758 Is Infringed (D.I. 366); Plaintiff's Renewed Motion For Judgment As A Matter Of Law (D.I. 394) That U.S. Patent No. 5,428,641 Is Infringed (D.I. 367)

By separate Motions, Plaintiff contends that it presented substantial evidence that the '054, '758, and '641 patents were indirectly infringed, such that the Court should enter judgment as a matter of law of no indirect infringement in Plaintiff's favor for each patent.<sup>12</sup> (D.I. 412, at 1-2; D.I. 413, at 2-3; D.I. 414, at 2-3.) Because each Motion presents substantially the same arguments and relies on substantially the same evidence from trial, the Court will address them together. Plaintiff generally contends that the evidence presented at trial proves that Defendant directly infringed the '054, '758, and '641 patents, that Defendant knowingly induced the infringement, and that Defendant acted with the requisite specific intent. (D.I. 412, at 3-4; D.I. 413, at 3-5; D.I. 414, at 3-5.) As discussed previously, the Court will not grant judgment as a matter of law

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<sup>12</sup> "[I]t should be noted that judgment as a matter of law is considered an extraordinary remedy for an unsuccessful plaintiff who bore the burden of proof at trial." Lucent Tech., Inc. v. Newbridge Networks Corp., 168 F. Supp. 2d 181, 266 (D. Del. 2001) (citing Dragan v. L.D. Caulk Co., 12 U.S.P.Q.2d 1081, 1083 (D. Del. 1989), aff'd, 897 F.2d 538 (Fed. Cir. 1990)). "In these circumstances, a court should only grant a motion for judgment as a matter of law when allowing the verdict to stand would result in manifest injustice." Id.



with respect to the jury's finding that the '054, '758, and '641 patents were directly infringed. Moreover, Defendant was aware of these patents, as it admits to having been put on notice of the patents in 2003. (See e.g., D.I. 428, at 7.)

Plaintiff first contends that knowing inducement and specific intent were proven because Defendant, after becoming aware of the '054, '758, and '641 patents, did not dispute Motorola's infringement conclusion, or make any attempt to avoid infringement by altering the accused products or instructing its customers on how to avoid infringement. (D.I. 412, at 4; D.I. 413, at 5; D.I. 414, at 5-6.) Specifically, Mr. Michael Stolarski, a former intellectual property counsel at Motorola, testified that Motorola (as former owner of the patents-in-suit) had a meeting with Defendant in August 2003 in which Motorola advised Defendant that Motorola believed Defendant needed a license to continue to manufacture and sell the accused products. Trial Tr. Vol. 1, 204:15- 205:13 (D.I. 379). Mr. Stolarski further testified that Defendant never disagreed with or contradicted Motorola's opinion. Tr. 208:18-21. Defendant contends that its failure to contest Motorola's assertion that the accused products infringed the '054, '758, and '641 patents is not conclusive of intent. (D.I. 424, at 9; D.I. 427, at 10; D.I. 428, at 10.) While Defendant never disagreed with the Motorola presentation, Mr. Stolarski testified that they also did not agree as to the merits of Motorola's assertions. Tr. 207:14-18. Mr. Stolarski also stated that during

the period around mid-2003, Defendant and Motorola were in a state of "detente," meaning that the "parties were in discussions with each other, in communications with each other, trying to process whether or not a license would be undertaken." Tr. 243:22-244:14. In addition, Plaintiff argues that Defendant did not present evidence of receiving any opinion of counsel that might have negated an inference of inducement of infringement. (D.I. 412, at 5; D.I. 413, at 5; D.I. 414, at 6.) Defendant responds that the jury considered the fact that Defendant did not obtain a formal opinion of counsel in this regard, and necessarily found it unpersuasive when they concluded that Defendant did not indirectly infringe the '054, '758, and '641 patents. (D.I. 424, at 10; D.I. 427, at 11; D.I. 428, at 11.)

Plaintiff next contends that knowing inducement and specific intent were proven because Defendant provided its customers with documentation about the accused products and how they worked. (D.I. 412, at 5; D.I. 413, at 6; D.I. 414, at 6.) Specifically, Dr. Bims testified that Defendant included a manual with the accused products instructing customers how to operate the modems, and when the modems were operated in the manner provided for in the manuals, they necessarily infringed. Tr. 462:17- 463:10. In response, Defendant characterizes these contentions as merely conclusory and irrelevant to a determination of specific intent. (D.I. 424, at 6; D.I. 427, at 7; D.I. 428, at 7.)

Plaintiff additionally contends that knowing inducement and specific intent were proven because Defendant marketed its accused products as being in compliance with V.34, V.90, and V.92 standards, and such compliance was essential to the processes covered by the asserted claims of the '054, '758, and '641 patents. (D.I. 412, at 5-6; D.I. 413, at 6-7; D.I. 414, at 6-7.) Dr. Bims testified that the patents-in-suit "describe technology that is also found in the- in these standards." Tr. 375:10-13. With respect to the '054 patent, Dr. Bims testified that the patent describes a "line probing" technique in which "two modems introduce themselves to one another." Tr. 375:20- 376:7. Mr. Richard Flanagan, a witness for Defendant who worked in the development and implementation of the accused products, testified that V.34 compliance is necessary in the modem industry because "when you call some other modem or try to connect, you need to have some assurance that there will be some base level of functionality that you can cont on." Tr. 1146:12-16. With respect to the '758 patent, Dr. Bims testified that the patent describes a functionality in which feedback is fed from the precoder to the mapper. Tr. 476:22- 477:19. Plaintiff contends that this feedback functionality is documented in the V.34 standard. (D.I. 413, at 6 (citing JTX-12, at 13).) With respect to the '641 patent, Dr. Bims testified that the patent describes a technique using one constellation rather than constellation switching, Tr. 384:3- 385:8, and that the V.34 standard describes

the use of one constellation, rather than constellation switching, as well. Tr. 384:3- 385:8; 458:7-17.

Although Defendant admits that the evidence demonstrates it had notice of the '054, '758, and '641 patents in 2003, it contends that compliance with the standards is irrelevant because the accused products were compliant before 2003. (D.I. 424, at 6-7; D.I. 427, at 7-8; D.I. 428, at 7-8.) With respect to the '758 and '641 patents, Defendant contends that it began selling V.34 compliant modems by at least 1994, before either of the '758 or '641 patents were issued. (D.I. 424, at 7; D.I. 427, at 8.) Defendant introduced into evidence an article from PC Magazine reviewing the V.34 compliant modems on the market in March 1995, including modems made by AT&T (one of Defendant's predecessors). (DX-18.)

Finally, Plaintiff contends that knowing inducement and specific intent were proven because Defendant knew that infringing products would be sold in the United States. (D.I. 424, at 7; D.I. 427, at 7; D.I. 428, at 6.) Specifically, Mr. Rai testified that Defendant usually interacted with a "middleman" rather than an end user, and that Defendant usually sold its products to a modem card manufacturer, who then would sell to a system manufacturer. Tr. 633:11-16; 686:22- 687:5. Mr. Rai also testified that "we have technology based direct interaction with the customer," and that "[w]e would cut deals with end users . . .

if it made business sense.” Tr. 688:24- 689:1; 689:13-14.

Further, Mr. Rai testified that Defendant’s modems come back into the United States inside computers sold by third parties, such as Toshiba. Tr. 617:11-22. Defendant responds that the evidence demonstrated that it lacked both knowledge and control concerning the ultimate disposition of the accused products after they were sold. (D.I. 424, at 7-9; D.I. 427, at 8-10; D.I. 428, at 8-9.) For example, Mr. Rai testified that Defendant does not track its products after shipment, and that Defendant only has a general sense of the ultimate disposition of its products throughout the world through trade literature, market studies and market shares. Tr. 637:9- 639:3. Additionally, Plaintiff’s damages expert, Ms. Julie Davis, testified that most parties she had dealt with in the industry did not know where their products went after the first delivery. Tr. 936:24- 937:17.

Viewing the evidence in the light most favorable to Defendant, as verdict winner, the Court cannot conclude that the jury’s verdict of no indirect infringement with respect to the ‘054, ‘758, and ‘641 patents was erroneous as a matter of law. Defendant admits that in 2003 it became aware of both the ‘054, ‘758, and ‘641 patents, and Motorola’s opinion that the accused products infringed those patents. The evidence indicates that Defendant did not articulate a position of the merits of such infringement contentions to Motorola. While Defendant’s failure to dispute Motorola could potentially be used as circumstantial

evidence that Defendant knowingly induced infringement and acted with specific intent, the jury was free to weigh such evidence, especially in light of other testimony that Defendant and Motorola were in a "detente." As previously noted, the Court is not at liberty to re-weigh the evidence or credit testimony of one witness over the other on a motion for judgment as a matter of law. With regard to standards compliance, evidence that the accused products were compliant prior to Defendant becoming aware of the '054, '758, and '641 patents, and that some of the accused products were compliant before the '758 and '641 patents were even issued, conceivably weighs against a finding of specific intent, and provides grounds for the jury's verdict of no indirect infringement. Because there was testimony that Defendant lacked knowledge and control over the accused products after shipment, although Defendant generally knew that computer sold by third parties containing its modems came into the United States, the jury could reasonably have concluded that Defendant's overseas sales did not support a finding of specific intent. Finally, that Defendant instructed its customers on how to operate the accused products (which necessarily infringed the '054, '758, and '641 patents during operation) might demonstrate that Defendant had knowledge of the acts constituting infringement, but is not conclusive of specific intent to induce infringement. Accordingly, the Court cannot conclude that the jury erred in its finding that the '054, '758, and '641 patents were not indirectly

infringed.

### **III. Invalidity**

The jury verdict found that the '054 and '758 patents are invalid because they were anticipated by a prior art reference. (D.I. 371.) Further, the jury returned a verdict that the '054, '758, and '776 patents are invalid for obviousness. (Id.) A presumption of validity attaches to issued patents. See 35 U.S.C. § 282. The party challenging a patent bears the burden of proving by clear and convincing evidence that the patent is invalid. See Helifix Ltd. v. Blok-Lok, Ltd., 208 F.3d 1339, 1346 (Fed. Cir. 2000).

"Anticipation is a factual determination that is reviewed for substantial evidence when decided by a jury." Koito Mfg. Co., Ltd. v. Turn-Key-Tech, LLC, 381 F.3d 1142, 1149 (Fed. Cir. 2004) (citations omitted). In pertinent part, 35 U.S.C. § 102(b) provides that "[a] person shall be entitled to a patent unless . . . the invention was patented or described in a printed publication in this or a foreign country . . . more than one year prior to the date of the application for patent in the United States." 35 U.S.C. § 102(b). "A rejection for anticipation under section 102 requires that each and every limitation of the claimed invention be disclosed in a single prior art reference." In re Paulsen, 30 F.3d 1475, 1478-79 (Fed. Cir. 1994). Such disclosure can be explicit or inherent in the prior art. In re Schreiber, 128 F.3d

1473, 1477 (Fed. Cir. 1997). However, mere disclosure of each and every limitation of a claim is not enough for anticipation. Indeed, “[a]n anticipating reference must enable that which it is asserted to anticipate.” Abbott Labs. v. Sandoz, Inc., 544 F.3d 1341, 1345 (Fed. Cir. 2008); see also In re Omeprazole Patent Litig., 483 F.3d 1364, 1378 (Fed. Cir. 2007) (“To ‘anticipate,’ the identical subject matter not only be previously known, but the knowledge must be sufficiently enabling to place the information in the possession of the public.”). Furthermore, a single prior art reference must also disclose the elements and limitations as arranged in the claim. Net MoneyIN, Inc. v. VeriSign, Inc., 545 F.3d 1359, 1371 (Fed. Cir. 2008) (internal citations omitted). The requirement for the prior art to be arranged as in the claim bespeaks the notion that “the hallmark of anticipation is prior invention.” Id. at 1369.

“Obviousness is a question of law based on underlying findings of fact.” In re Kubin, 561 F.3d 1351, 1355 (Fed. Cir. 2009). The underlying factual inquiries to be considered by the fact finder are: (1) the scope and content of the prior art; (2) the differences between the prior art and the claimed subject matter; (3) the level of ordinary skill in the pertinent art; and (4) secondary considerations of non-obviousness, such as commercial success, long felt but unresolved need, failure of others, acquiescence of others in the industry that the patent is



valid, and unexpected results. Graham v. John Deere Co., 383 U.S. 1, 17-18 (1966); see also Perfect Web Tech., Inc. v. InfoUSA, Inc., 587 F.3d 1324, 1327 (Fed. Cir. 2009). In pertinent part, 35 U.S.C. § 103 provides that a patent is invalid for obviousness "if the difference between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." 35 U.S.C. § 103(a).

A. Plaintiff's Renewed Motion For Judgment As A Matter Of Law (D.I. 394) That U.S. Patent No. 5,048,054 Is Not Invalid (D.I. 365)

1. *Anticipation*

By its Motion, Plaintiff contends that Defendant's invalidity position is that U.S. Patent No. 4,757,495 (the "'495 patent") and U.S. Patent No. 4,679,227 (the "'227 patent") in combination practice each element of Claims 1, 12, and 46 of the '054 patent. (D.I. 412, at 7.) First, Plaintiff contends that this combination cannot provide the basis for the jury's finding of anticipation because anticipation requires that each limitation of a claim element be found in a single reference. (Id. at 10.) Moreover, Plaintiff contends that Defendant's anticipation argument is substantively wrong because the '495/'227 patent combination does not even teach all recited elements of Claims 1, 12, and 46 of the '054 patent. (Id. at 7.) Specifically, Plaintiff contends that Defendant failed to present any evidence that the cited prior art

references teach:

(i) a line probing signal simultaneously stimulating more than one of a plurality of frequency bands; (ii) a line probing processor for measuring characteristics of a channel based upon a received line probing signal; and (iii) a selector for selecting one of the plurality of frequency bands based on the measured characteristics, as required by claim 1.

(Id. at 7-8.) Plaintiff also argues that the testimony of Dr. Steven Tretter, Defendant's expert, is too conclusory in multiple respects to support an invalidity finding. (Id. at 8-9.)

Defendant responds that the jury's finding of anticipation is well-supported by the evidence, that the evidence must be considered as a whole, and that Plaintiff introduced no evidence at trial to contradict Dr. Tretter's testimony. (D.I. 428, at 12.) Defendant contends that it did not put forth a two-reference anticipation argument, and that it clearly established that both the 495 and '227 patents, standing alone, anticipate Claims 1, 12, and 46 of the '054 patent. According to Defendant, Dr. Tretter's testimony sufficiently established that every element of Claims 1, 12, and 46 of the '054 patent is disclosed by the '495 patent and by the '227 patent. (Id. at 17-21.) Further, Defendant contends that Dr. Tretter's testimony was not conclusory, that he "walked the jury, element-by-element, through his analysis showing where, in both prior art references, he found all the elements of the '054 patent," and that the demonstratives he used were merely summaries of his full analysis. (Id. at 14-15.)

Although Defendant notes that Plaintiff did not present any

testimony rebutting Dr. Tretter, the Court is mindful that Defendant bore the burden of proving invalidity by clear and convincing evidence. Thus, the jury's verdict can only be upheld if Dr. Tretter's unrebutted testimony, along with any other evidence, provides a legally sufficient basis for finding the '054 patent invalid. The Court is persuaded that Dr. Tretter's testimony is deficient in several respects and cannot support the jury's finding that the '054 patent is invalid.

Dr. Tretter testified that each of the asserted claims of the '054 patent had three elements: a receiver, a line probing processor, and a selector. Tr. 1389:24- 1390:4. He further testified that the three elements are materially the same between the three asserted claims. Tr. 1392:5-9. Dr. Tretter looked at two prior art references in his analysis- the '495 patent and the '227 patent- and stated that he found the asserted claims of the '054 patent invalid with respect to each patent. Tr. 1425:22- 1426:6 (Q: "With respect to each of these patents, did you find that the asserted claims of the '054 patent are invalid?" A: "Yes.") (emphasis added).

The evidence does not support the jury's finding that the '054 patent was anticipated because Dr. Tretter's testimony does not sufficiently demonstrate that the receiver element is present in both the '495 and '227 patents. Dr. Tretter testified that the "'495 patent has words that says it incorporates the '227 patent by reference." Tr. 1427:18-20. He goes on to clarify that the

'495 patent "says the application Serial Number 736,200 is incorporated by reference in this application," and that the application serial number refers to the '227 patent. Tr. 1428:8-1429:4. In the Court's view, this position- that the '495 patent incorporates the '227 patent- forms the basis of Dr. Tretter's testimony that the receiver element is present in both prior art references. Dr. Tretter agreed that his position was that "these two patents *read together* would have all the - have in them the receiver of the '054 patent." Tr. 1434:21-24 (emphasis added).<sup>13</sup>

"Material not explicitly contained in the single, prior art document may still be considered for purposes of anticipation if that material is incorporated by reference into the document." Advanced Display Sys., Inc. v. Kent State Univ., 212 F.3d 1272, 1282 (Fed. Cir. 2000). "Incorporation by reference provides a method for integrating material from various documents into a host document-a patent or printed publication in an anticipation determination-by citing such material in a manner that makes clear that the material is effectively part of the host document as if it were explicitly contained therein." Id. In order to

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<sup>13</sup>Although it is not evidence, the demonstrative relied on by Dr. Tretter in summarizing his invalidity analysis further demonstrates that his opinion regarding the receiver element is dependant on the '227 patent being incorporated into the '495 patent. In the demonstrative claims chart, Dr. Tretter cited to the following portion of the '495 patent as disclosing the receiver: "ensemble modem as disclosed in the ['227 Patent]. (D.I. 428, Ex. B, D38-D (alterations by Defendant).) Moreover, Dr. Tretter's claims chart identifies a certain element (the "modulated signal") as appearing only in the '227 patent. (Id.)

incorporate material by reference, a host document must (1) "identify with detailed particularity what specific material it incorporates," i.e. the subject matter to be incorporated, and (2) "clearly indicate where that material is found in the various documents." Id. Whether and to what extent material has been incorporated by reference into a host document is a question of law. Id. at 1283.

From the evidence presented at trial, the Court cannot conclude as a matter of law that the '227 patent was incorporated by reference into the '495 patent. The '495 patent specifically incorporates by reference U.S. Patent Appl. No. 06-736,200 (the "'200 application"), from which the '227 patent was ultimately issued:

The first component [of the present invention] is a multi-carrier, multi-mode, ensemble modem as disclosed in U.S. patent application Ser. No. 06-736,00 filed May 20, 1985. . . . *The application serial number 06-736,200 is incorporated by reference in this application in accordance with the provisions of section 608.01(p) of the Manuel of Patent Examining Procedure of the U.S. Patent and Trademark.*

'495 patent, col. 4:6-15 (emphasis added) (DX-99). The '200 application was never introduced into evidence in the present action. Moreover, no evidence was presented to demonstrate that the issued '227 patent,<sup>14</sup> in relevant part, is the same as the '200 application. The Court agrees with Plaintiff's observation that without evidence drawing "any connection between the specific

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<sup>14</sup> The issued '227 patent was introduced into evidence. (DX-100.)

portions of the '227 patent [Defendant] relied upon at trial and the specific portion of the '200 application called out in the '495 patent," (D.I. 412, at 11), the jury could not reasonably have concluded that the receiver element was disclosed by the '495 patent.

The Court additionally concludes that Dr. Tretter's testimony with regard to the line probing processor and selector elements is too conclusory to support the jury's finding that Claims 1, 12, and 46 of the '054 patent are invalid as anticipated by the '495 and '227 patents. The sum of Dr. Tretter's testimony on the line probing processor element is as follows:

Let's see. The - determine the response of the analog channel to the transmission of the 512 possible signal carriers. Signal carriers of a line probing signal.

And here is our line probing processor. Measures the background noise at each carrier frequency.

So it gives another parameter that's measured. And we know what you transmit, the line probing signal. You can look at what you receive, whether it's made larger or smaller at each given frequency.

And that's called the signal loss, which is related to the frequency response of the channel and indirectly related to the impulse response, usually what's known as inverse fourier transform. Getting too technical, I know.

So this claim chart shows that all the elements are present over here that are over here.

Tr. 1435:7- 1436:4. Dr. Tretter's testimony on the selector element is even more cursory:

Selector means for selecting at least one data sub-band. So data versus voice.

Both originate and answer modem - originate is another word for call modem. Still another word. The originate and answer modem now have data relating to the transmission in the answer-originate direction. Somewhere up there, it says that reverse direction also.

So again, all the elements over here are found in prior art.

Tr. 1436:10-20.

"General and conclusory testimony . . . does not suffice as substantial evidence of invalidity." Koito Mfg. Co., 381 F.3d at 1152. The Federal Circuit has consistently stated that in order to show anticipation by a given reference, "testimony concerning anticipation must be testimony from one skilled in the art and must identify each claim element, state the witnesses' interpretation of the claim element, and explain in detail how each claim element is disclosed in the prior art reference. The testimony is insufficient if it is merely conclusory." Id. (citing Schumer v. Lab. Computer Sys., Inc., 308 F.3d 1304, 1315-16 (Fed. Cir. 2002)).

Even when the above-cited testimony is considered in context with the demonstrative Dr. Tretter presented to the jury and the references submitted into evidence, at most this testimony amounts to a bare recitation of excerpts from the '495 and '227 patents which supposedly disclose the elements of Claims 1, 12, and 46 of the '054 patent. Dr. Tretter provided no explanation of how or why each of the claim elements were disclosed in the cited portions of the '495 and '227 patents. Further, he offered no testimony that either reference was enabling, or that either reference disclosed the limitations as arranged in Claims 1, 12, and 46. Accordingly, the Court concludes that Defendant failed to

put forth a sufficient evidentiary basis to sustain the jury's finding of anticipation.

## 2. *Obviousness*

Plaintiff contends that Defendant failed to provide substantial evidence to support the jury's finding of obviousness with regard to Claims 1, 12, and 46 of the '054 patent. (D.I. 412, at 12-13.) Specifically, Plaintiff contends that Defendant's obviousness contentions suffer from the same deficiencies as its anticipations contentions, i.e., that Dr. Tretter's testimony fails to conduct an element-by-element analysis of the '495 and '227 patents. (*Id.* at 13.) Further, Plaintiff contends that Dr. Tretter's testimony that the '495 and '227 patents together were obvious is both conclusory and unsupported by documentary evidence. (*Id.*) Defendant contends that Dr. Tretter's testimony was not conclusory, and that his opinions on obviousness need to be considered in light of his testimony regarding anticipation. (D.I. 428, at 22.) Defendant argues that, in addition to his anticipation testimony, Dr. Tretter testified to a motivation to combine the '495 and '227 patents, and thus, the evidence was sufficient to support a finding of obviousness. (*Id.* at 23.)

The Court concludes that the record does not contain substantial evidence to support Defendant's contention that the asserted claims of the '054 patent were obvious in light of the '495 and '227 patents. Besides the testimony discussed above with regard to anticipation, the only additional testimony provided by



Dr. Tretter with regard to obviousness is as follows:

- Q: [I]f you were to consider these references separately, the '495 and '227, and then looked at the question of obviousness, would you also find in that context that the claims of the '054 patent would have been obvious in light of these two references together?
- A: Individually - oh, obvious? Yes. Together, they would be obvious.
- Q: And the motivation to combine is found in the '495 patent, which actually incorporates the '227 patent; is that right?
- A: Yes.

Tr. 1437:7-19. As previously noted, Dr. Tretter's testimony does not adequately examine the scope and content of the '495 and '227 patents as they relate to the asserted claims of the '054 patent, nor does it adequately consider the differences between the prior art and the claims at issue. While Dr. Tretter did testify to the motivation for combining the '495 and '227 patents, on the whole, his testimony was inadequate to allow the jury to make the requisite underlying factual inquiries necessary for a determination on obviousness. Accordingly, the Court will grant judgment as a matter of law that the '054 patent is not invalid.

B. Plaintiff's Renewed Motion For Judgment As A Matter Of Law (D.I. 394) That U.S. Patent No. 5,446,758 Is Not Invalid (D.I. 366)

By its Motion, Plaintiff contends that no prior art reference or combination of prior art references suggests "feedback to the mapper," a claimed element in asserted Claims 1, 26, and 36 of the '758 patent, and thus, that no evidentiary support exists for the jury's finding of invalidity on either anticipation or obviousness grounds. (D.I. 413, at 9-10.) Further, Plaintiff contends that

Dr. Tretter testified that there were several differences between the '758 patent and either of two prior art references, the Laroia paper (TIA Subcommittee Contribution TR30.1/93-06, "ISI Coder - Combined coding and precoding") (DX-87) or U.S. Patent No. 5,488,633 (the "'633 patent") (DX-98). (Id. at 9.) Finally, Plaintiff contends that the original Laroia paper differed from Dr. Tretter's redrawing with regard to the output from the modulo unit. (Id. at 18.)

Defendant responds that Plaintiff's Motion should be denied because the jury's findings of anticipation and obviousness are both well-supported by the evidence, the evidence must be considered as a whole, and Plaintiff introduced no evidence at trial to contradict Dr. Tretter's testimony. (D.I. 427 at 12-13.) Defendant contends that Dr. Tretter's testimony established that the "feedback" required by the asserted claims of the '758 patent is present in both the Laroia paper and the '633 patent. (Id. at 16-17.) Contrary to Plaintiff's assertion that Dr. Tretter testified that there were differences between the '758 patent and the prior art references, Defendant contends that Dr. Tretter actually testified that the prior art references and the '758 patent are exactly the same, and that each element of the '758 patent is disclosed in both the Laroia paper and the '633 patent. (Id. at 14-15.) Finally, Defendant contends that the alleged differences between the output from the modulo unit in the redrawing and the original Laroia paper did not affect Dr.

Tretter's analysis. (Id. at 18.)

1. *Anticipation*

In the Court's view, of the three prior art references cited by Defendant- the Laroia paper, the '633 patent, and U.S. Patent No. 5,388,124 (the "'124 patent")- only the Laroia paper can provide the basis for the jury's anticipation finding. Dr. Tretter's testimony clearly demonstrates that one of the prior art references, '124 patent, does not anticipate the '758 patent, and that the '124 patent is relevant to an obviousness determination. See Tr. 1376:5-20 (agreeing that if a required claim element were not found in either the Laroia paper or the '633 patent, "that one could combine the Laroia paper or the Laroia patent with the '124 reference and it would be obvious and invalid of the '758 patent"). With regard to the '633 patent, Dr. Tretter's testimony amounts to nothing more than a statement that he conducted a detailed analysis of the '633 patent, and that he concluded that it anticipated the asserted claims of the '758 patent because "it contains all the same description, and explanation and elements." Tr. 1375:13- 1376:4. Because Dr. Tretter did not identify where each claim element is disclosed in the '633 patent, let alone provide any explanation of his opinion in that regard, his testimony is too conclusory to support a jury finding that the '633 patent anticipated the '758 patent.<sup>15</sup>

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<sup>15</sup> Dr. Tretter did testify that the '633 patent covers "basically" the same material as was disclosed in the Laroia

Turning to the Laroia paper, the Court concludes that Dr. Tretter's testimony provided an evidentiary basis for the jury's finding of anticipation. Dr. Tretter testified that in order for the '758 patent to be invalid, all elements of asserted Claims 1, 26, and 36 would have to be found in the Laroia paper. Tr. 1356:1-10. He further testified that asserted Claim 1, 26, and 36 each had two elements: a mapper and a precoder. Tr. 1356:17-19.

First, Dr. Tretter sufficiently demonstrated that the Laroia paper disclosed the requisite "feedback to the mapper" of the '758 patent. Dr. Tretter explained that within the "mapper" disclosed by the '758 patent, there is a mapping unit and a code tracker, also known as a trellis encoder. Tr. 1357:9-20; Tr. 1609:12-16. He explained that in the '758 patent, the precoder's channel output sequence  $y(d)$  feeds into the code tracker, or trellis encoder. Tr. 1357:21- 1358:14; Tr. 1610:7-22. In comparing what is disclosed by the Laroia paper with what is disclosed in the asserted claims of the '758 patent, Dr. Tretter admitted that the mapper shown in Figure 1 of the Laroia paper is "not the same mapper as in the patent," and that in the Laroia paper, the trellis encoder is separate from the mapping unit. Tr. 1363:17-18; 1364:22-26. However, Dr. Tretter testified that the word "mapper" does not have a fixed meaning, but rather, takes its meaning from what is inside the box that has been labeled as a

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paper. Tr. 1349:2-6.

"mapper."<sup>16</sup> Tr. 1491:17-22. Thus, while the '758 patent shows feedback going into the mapper, what it really discloses, according to Dr. Tretter, is output  $y(d)$  going into a trellis encoder. Dr. Tretter testified that Figure 1 of the Laroia paper discloses channel output sequence  $v(k)$ - which is identical to  $y(d)$ - flowing into a trellis encoder. Tr. 1367:1-7; Tr. 1610:11-111:8. Further, Dr. Tretter testified that the fact that the trellis encoder was separate from the mapping unit in the Laroia patent (rather than together as in the '758 patent) "doesn't change what they are." Tr. 1365:1-3. Accordingly, the Court concludes that a reasonable jury could have concluded that the Laroia paper disclosed the "feedback to the mapper" element claimed in Claims 1, 26, and 36 of the '758 patent.

Second, Dr. Tretter's testimony sufficiently established that the Laroia paper and the '758 patent are exactly the same. In order to illustrate how the disclosures of the Laroia paper matched up to the '758 patent, Dr. Tretter prepared his own diagram rearranging the Figure in the Laroia paper. Tr. 1365:7-20. Defendant contends that in so doing, Dr. Tretter acknowledged a "slight difference" between the '758 patent and the Laroia paper, with a signal "going into the mapper [in the '758 patent,]" but "go[ing] into the quantizer in the box [in the Laroia paper.]"

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<sup>16</sup>Plaintiff did not present any testimony to dispute Dr. Tretter's assertion that the term "mapper" takes its meaning from what it contains, and accordingly, the jury was free to credit Dr. Tretter's testimony on this point.

Tr. 1367:10-12. However, Dr. Tretter immediately went on to testify at length about this alleged difference and explain why he concluded that "functionally [they]'ve accomplished *exactly the same thing*." Tr. 1367:13- 1373:16 (emphasis added). Plaintiff also contends that Dr. Tretter admitted that his diagram was incorrect, and that it displayed differences in outputs from the original Figure in the Laroia paper. This testimony concerned Dr. Tretter's drawing, however, and not a comparison of the disclosures of the actual Laroia paper and the '758 patent. Thus, the jury was free to weigh the value of the drawing and make credibility determinations based on Dr. Tretter's alleged discrepancy.

Upon review of the record, the Court is satisfied that Dr. Tretter identified each claim element, explained his interpretation of the claim element, and described in detail how each claim element is disclosed in the prior art reference. See Tr. 1357:21- 1358:19, 1359:6- 1360:21 (identifying the precoder in '758 patent and explaining its function); Tr. 1363:11-16 (identifying the precoder in Figure 1 of Laroia paper and comparing its function to '758 patent); Tr. 1356:23- 1357:20, 1361:9-15, 1362:6-12 (identifying the mapper in '758 patent and explaining its function); Tr. 1363:17- 1364:21 (identifying the mapper in Figure 1 of Laroia paper and comparing its function to '758 patent). Accordingly, the Court concludes that Defendant put forth a sufficient evidentiary basis to sustain the jury's finding

of anticipation.

## 2. *Obviousness*

Moreover, the Court concludes that Dr. Tretter's testimony provided a sufficient evidentiary basis for the jury's finding of obviousness. Dr. Tretter testified that, having a masters degree in electrical engineering and experience in the modem industry, he possessed a level of ordinary skill in the art with regard to the '758 patent. Tr. 1338:17-22. He testified that in his opinion, that the '758 patent was obvious from the combination of the '124 patent with either the '633 patent or the Laroia paper. Tr. 1376:13-20. Dr. Tretter downplayed any potential differences between the '758 patent and the Laroia paper, and consistently testified that the '758 patent and the Laroia paper were functionally the same. See Tr. 1364:22- 1365:6; 1367:8-13; 1369:14- 1373:16. Further, Plaintiff has not directed the Court's attention to any evidence of record supporting non-obviousness. As the trier of fact, the jury was responsible for weighing the evidence presented on obviousness, and for determining Dr. Tretter's credibility as a witness. The Court will not re-weight the evidence, and in light of the lack of evidence of non-obviousness and the substantial testimony minimizing the differences between the '758 patent and the prior art references, a reasonable jury could have found that Defendant established, by clear and convincing evidence, that the '758 patent is invalid for obviousness.

In sum, the Court cannot conclude that the jury erred in concluding that the '758 patent is invalid as anticipated and obvious, and accordingly, Plaintiff's Motion will be denied.

C. Plaintiff's Renewed Motion For Judgment As A Matter Of Law (D.I. 394) That U.S. Patent 6,498,776 Is Not Invalid (D.I. 368)

By its Motion, Plaintiff contends that Dr. Tretter conceded on cross-examination that none of the three prior art references- U.S. Patent No. 4,831,635 (the "'635 patent") (DX-80), U.S. Patent No. 4,901,331 (the "'331 patent") (DX-81), or the Tomlinson paper (DX-258)- contained the "equivalence class" limitation. (D.I. 415, at 2-3.) Because the "equivalence class" limitation is present in asserted Claims 1, 9, and 30 of the '776 patent,<sup>17</sup> Plaintiff contends that the evidence is legally insufficient to support the jury's finding that the '776 patent was invalid on obviousness grounds. (Id.)

Defendant responds that Plaintiff's Motion should be denied because the jury's finding of obviousness is well-supported by the evidence, the evidence must be considered as a whole, and Plaintiff introduced no evidence at trial to contradict Dr. Tretter's testimony. (D.I. 426 at 3-4.) Specifically, Defendant contends that Dr. Tretter did not make the admission Plaintiff alleges, and further, that he actually testified that the

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<sup>17</sup> The '776 patent defines "equivalence class" to be "a set of typically two or more constellation points which represent the same group of bits or digital data to be transmitted." '776 patent, col. 9:9-12 (JTX 7).



equivalence classes described in the '776 patent were disclosed in the prior art. (Id. at 5.)

In presenting his obviousness opinion, Dr. Tretter testified that Claims 1, 9, and 30 of the '776 patent all contained two element: a mapping device and a constellation point selector transmitter elements. He further testified that, with regard to the constellation point selector, "the equivalence class is important here in that for a group of data bits that come in, you can map that to several different levels which are called equivalence classes and there is a way to use these different points to optimize your transmission." Tr. 1445:24- 1446:6. Upon review of Dr. Tretter's testimony as a whole, the Court concludes that, contrary to Plaintiff's assertion, Dr. Tretter did not admit that the "equivalence class" limitation was lacking from all prior art references. In relevant part, the cross-examination went as follows:

Q: You didn't tell me to go to the specification, that wasn't your testimony, You told me to go to these lines [in the claims of the 331 patent], and I went to these lines and it doesn't say anything about those points conveying the same information; right?

A. That's true. But if you go to the specification, you will see that means for selecting one of saif plurality of signal points tells you that.

Tr. 1574:22- 1575:7. Moreover, it is apparent from the record that Dr. Tretter's comments were limited to the '331 patent, and did not relate to his prior testimony regarding the '635 patent. See Tr. 1573:5 - 1574:5 (discussing Dr. Tretter's testimony on

direct examination regarding the '331 patent).

The Court concludes that Dr. Tretter's testimony identifies and explains the "equivalence class" disclosures in the '331 and '635 patent with sufficient specificity to support the jury's obviousness verdict. Dr. Tretter explained the function of the constellation point selector transmitter, noting the importance of the equivalence class. Tr. 1445:2- 1446:6. With regard to the '331 patent, Dr. Tretter referred back to his previous explanation of an equivalence class, pointed to column 13, lines 51-53 of the '331 patent, and testified that "there is a different name used, but it's the same thing, a plurality of signal points of said one subject [sic]. That's patentee saying for equivalence class."<sup>18</sup> Tr. 1452:8-11. With regard to the '635 patent, Dr. Tretter pointed to column 10, lines 9-29 and similarly testified that "'635 has a data transmission system. Defines an equivalence class. This is the same as the previous one. Again, in more disguised language, identifying a plurality of signal points of said one subset." Tr. 1458:11-17. Accordingly, the Court cannot conclude that the jury erred as a matter of law in finding the '776 patent invalid on obviousness grounds.

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<sup>18</sup>The Court recognizes that Plaintiff brought out on cross-examination that column 13, lines 51-53 of the '331 patent does not actually state what Dr. Tretter represents it to on his demonstrative claim chart. However, Dr. Tretter also identified and explained where the "equivalence class" limitation was disclosed in the '635 patent, and it was the jury's role, as fact finder, to weigh that testimony in light of Dr. Tretter's admitted error with regard to the '331 patent.

### **CONCLUSION**

For the reasons discussed, the Court will grant judgment as a matter of law of no indirect infringement with regard to the '776 patent, and will grant judgment as a matter of law of no invalidity with regard to the '054 patent. Further, the Court will grant judgment as matter of law of no infringement under a theory of component liability. In all other respects, the Court upholds the findings of the jury.

An appropriate Order will be entered.